REMARKS

This is intended as a full and complete response to the Office Action dated August 16, 2004, having a shortened statutory period for response set to expire on November 16, 2004. Claims 31-35 are currently pending in the application. Please reconsider the claims pending in the application for reasons discussed below.

Claim Rejections Under 35 U.S.C. § 102(b)

The Examiner rejected claim 31 as being anticipated by *Payne,* U.S. Patent No. 4,306,127. In response, Applicant has amended claim 31.

As amended, claim 31 includes a limitation of positioning a device in a site which is normally surrounded by a first medium, the site being in a region of potential chemical leakage of a second medium, the device comprising an indicator element which is held in a first position by means of a failure element which is held in tension, the failure element being made of a material which is designed not to fail in the first medium, but to fail readily in the presence of the second medium, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of the leak. *Payne* does not disclose a device normally surrounded by a first medium, wherein the device is designed to fail readily in the presence of a second medium, such as a chemical leakage. Rather, *Payne* discloses a device for monitoring the corrosive action in only one medium (fluid in a heat exchanger), whereby the device is designed to fail over time to provide an indication that there is a potential risk of corrosion with the surrounding pipe work due to the one medium flowing therethrough. (See *Payne,* col. 3, lines 5-10 and col. 6, lines 38-43) *Payne* therefore fails to teach each and every one of the limitations of amended claim 31, and this failure precludes *Payne* from anticipating claim 31. For these reasons, Applicant submits that claim 31 is in condition for allowance and respectfully requests withdrawal of the § 102(b) rejection of claim 31.

Claim Rejections Under 35 U.S.C. § 103(a)

The Examiner rejected claim 32 as being obvious over *Payne*. In response, Applicant has amended claim 32.

As amended, claim 32 includes a limitation of positioning an arrangement for detecting the presence of a chemical leak over a predetermined area at a site which is normally surrounded by a first medium, the site being in a region of potential chemical leakage of a second medium, the arrangement comprising a plurality of devices arranged over the area, each device comprising an indicator element which is held in a first position by means of a failure element which is held in tension, the failure element being made of a material which is designed not to fail in the first medium, but to fail readily in the presence of the second medium, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of the leak. For similar reasons as discussed above, *Payne* does not disclose these limitations. Rather, *Payne* discloses a device for monitoring the corrosive action in only one medium, whereby the device is designed to fail over time to provide an indication that there is a potential risk of corrosion with the surrounding pipe work due to the one medium flowing therethrough. (See *Payne,* col. 3, lines 5-10 and col. 6, lines 38-43) For this reason, *Payne* can not be used to render claim 32 obvious. Applicant therefore submits that claim 31 is in condition for allowance and respectfully requests withdrawal of the § 103(a) rejection.

The Examiner rejected claims 33-35 as being obvious over *Heintzelman,* U.S. Patent No. 5,030,033, in view of *Payne*. The Examiner states that *Heintzelman* discloses a method of detecting leaks from a vessel in a filling station containing a potential source of chemical contaminants. The Examiner further states that *Heintzelman* does not disclose the method whereby the device for detecting the presence of a chemical contaminant comprises an indicator element which is held in a first position by a failure element held in tension, whereby the failure element is made from a material which fails in the presence of a chemical contaminant. The Examiner attempts to supplement this missing limitation by using *Payne,* which the Examiner states as disclosing a device for detecting chemical leakage, the device having an

indicator element which is held in a first position by a means of a failure element that is held in tension. According to the Examiner, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the leakage detector of *Heintzelman* to have the structure of the leakage detector of Payne, since *Heintzelman* discloses that several types of leakage detectors could be used and since *Payne* discloses using the leakage detector in several types of apparatus. Applicant respectfully traverses the rejection.

Heintzelman discloses an underground tank storage system that includes a leak sensor to sense and respond to a tank leak. *Heintzelman* states that one difficulty in leak detection is the time delay between the onset of a leak and its detection at a location typically remote from the storage container. (See *Heintzelman* col. 1, lines 30-33) Further, *Heintzelman* states that prompt leak detection is essential to any sophisticated underground tank storage system. (See *Heintzelman* col. 1, lines 52-54) *Payne* discloses a corrosion sensor for monitoring the corrosive action in the fluid of a heat exchanger system, whereby the corrosion sensor is designed to fail over time to provide an indication that there is a potential risk of corrosion with the surrounding pipe work due to the one medium flowing therethrough. (See *Payne,* col. 3, lines 5-10)

Essentially, the Examiner relies on the fact that *Heintzelman* discloses that several types of leakage detectors could be used and that *Payne* discloses using the leakage detector in several types of apparatus. The fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish *prima facie* obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993) Regarding the references cited by the Examiner, the underground tank storage disclosed in *Heintzelman* requires the use of a sensor that provides a prompt leak detection means rather than a sensor that is designed to fail over time as disclosed in *Payne*. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, (Fed. Cir. 1990)

Additionally, although *Payne* indicates that the corrosion sensor may be used in other types of apparatus, this indicates that the sensor may be used in an apparatus

where corrosion sensing is desired. Any indication that the device could be used beyond the field of corrosion sensing is based upon hindsight as the device is simply unsuitable for such uses. Further, the Examiner indicates that the detector disclosed in *Heintzelman* includes a failure element. This is not the case. Suitable types of liquid detectors are disclosed in *Heintzelman* (col. 10, lines 26-33), and none of these have a failure element. The vapor sensor discussed in *Heintzelman* (col. 10, lines 37-64), also does not require a failure element.

For the reasons discussed above, it is improper to assert that *Heintzelman* may be combined with *Payne* to render Applicant's invention obvious. Applicant therefore submits that claims 33-35 are in condition for allowance and respectfully requests withdrawal of the § 103(a) rejection.

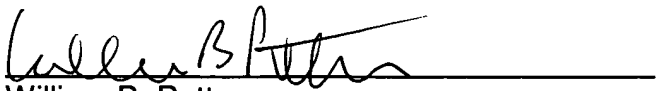
Conclusion

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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